Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

VOL. 14 No. 48

November 27, 1964

Cooperative ECONOMIC INSECT REPORT

LIBRARY
RECEIVED
DEC 2 1964
U.S. DEPT. OF AGRICULTURE
BELTSVILLE BRANCH

Issued by

PLANT PEST CONTROL DIVISION

AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL DIVISION

SURVEY AND DETECTION OPERATIONS

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Division serves as a clearing house and does not assume responsibility for accuracy of the material.

Reports and inquiries pertaining to this release should be mailed to:

Survey and Detection Operations
Plant Pest Control Division
Agricultural Research Service
United States Department of Agriculture
Federal Center Building
Hyattsville, Maryland 20781

Volume 14 November 27, 1964 Number 48

COOPERATIVE ECONOMIC INSECT REPORT

HIGHLIGHTS

GREENBUG survey in 24 panhandle counties of Texas showed low populations of not over 5 per foot in 14 counties; found mostly in large volunteer wheat. (p. 1253).

CITRUS RUST MITE and GLOVER SCALE above normal and in high range on Florida citrus; BROWN SOFT SCALE has been less abundant since June than in any comparable month during last 14 years of record. (pp. 1255-1256).

Two adult MEXICAN FRUIT FLY males trapped at Nogales, Arizona; first for this year. (p. 1255).

DETECTION

SPOTTED ALFALFA APHID (*Therioaphis maculata*) recorded for first time in Wyoming. (p. 1253). New parish and new county records included IMPORTED FIRE ANT (*Solenopsis saevissima richteri*) in Sabine Parish, Louisiana, (p. 1259), and WHITE-FRINGED BEETLES (*Graphognathus* spp.) in Marshall County, Tennessee, and in Gaston County, North Carolina, (p. 1259).

CORRECTIONS

See page 1260.

SPECIAL REPORTS

A Change in the Scientific Name of the Fall Armyworm (*Spodoptera frugiperda*). (p. 1254).

Status of the Screw-worm in the Southwest. (p. 1262).

Interceptions of Special Interest at U.S. Ports of Entry. (p. 1263).

Estimated Losses and Production Costs Attributed to Insects and Related Arthropods Attacking Grain Sorghum, Wheat and Cotton (Lint) in Texas in 1963. (pp. 1265-1266).

Reports in this issue are for week ending November 20, unless otherwise indicated.

WEATHER OF THE WEEK ENDING NOVEMBER 23

The season's coldest weather spread across the Nation during the past week. Heavy rains fell over the southern Great Plains and deep snow accumulated at some Rocky Mountain localities and in the lee of the Great Lakes.

TEMPERATURE: Polar, continental air spread southward across the country. The temperatures over the northern Great Plains dropped to far below zero. Minot, North Dakota, registered 8° below zero Friday morning and 6° above zero in the afternoon. Subzero temperatures occurred over parts of Nevada and Utah and in northern Maine. Freezing temperatures occurred over much of the Deep South. Atlanta, Georgia, registered 22° and Mobile, Alabama, 29° on Sunday morning. The cold wave ended the Indian summer in Pennsylvania and nearby States. Temperatures over Pennsylvania which had been 15° to 20° above normal at the beginning of the week dropped to 10° to 12° below normal at the end of the period. In spite of the cold trend during the week, weekly temperatures averaged above normal southeast of a line from Del Rio, Texas, to Philadelphia, Pennsylvania. This was because of the warm weather during the first several days of the week. Temperatures over parts of the northern Great Plains and the intermountain region averaged more than 10° below normal.

PRECIPITATION: Heavy rains accompained the cold front as it crossed the southern Great Plains. Parts of southwestern Oklahoma and northeastern Texas received 3 to 5 inches with 1 to 2 inches in nearby areas. Heavy snow fell at some mountain locations. Lead, South Dakota, received 10 inches of fresh snow. Snow accumulated to 25 inches at Burgess, Wyoming. Snow fell over the Sierras and at higher elevations of the southern Rocky Mountains. Deep snow fell in the lee of the Great Lakes. Buffalo, New York, and Erie, Pennsylvania, received 20 and 18 inches respectively. (Summary supplied by U.S. Weather Bureau).

CEREAL AND FORAGE INSECTS

SPOTTED ALFALFA APHID (*Therioaphis maculata*) - WYOMING - Detected in alfalfa at Torrington, Goshen County, on October 14, 1964, by G. R. Manglitz. Total of 11 oviparous females and 6 apterous and 1 alate viviparous females collected in sweepings. This is the westernmost spread of the holocyclic strain. This is also a new State record. (Marks). SOUTH DAKOTA - Approximately 70-75 per 100 sweeps collected in field of alfalfa in Hutchinson County on November 13, 1964; approximately 15-30 percent of population sexual forms and 1-2 percent alates. (Hintz). NEBRASKA - Averaged 17 per 10 sweeps in Colfax, Lancaster and Sarpy Counties, and 6 per 10 sweeps in Thurston County. (Bergman). OKLAHOMA - Light in alfalfa in Choctaw County; averaged 18 per 10 sweeps. (Okla. Coop. Sur.). NEW MEXICO - Very light in alfalfa near Portales, Roosevelt County; ranged 5-10 per 25 sweeps. (N.M. Coop. Rpt.). ARIZONA - Very light in Yuma County alfalfa. (Ariz. Coop. Sur.). FLORIDA - Several hundred collected in 100 sweeps of alfalfa 13-15 inches high at Gainesville, Alachua County; some plants blooming. (Mead, Nov. 19).

PEA APHID (*Acyrthosiphon pisum*) - NEW MEXICO - Continued light in alfalfa checked in Dona Ana and Roosevelt Counties; ranged 20-30 per 25 sweeps in fields checked near Portales, Roosevelt County. (N.M. Coop. Rpt.). OKLAHOMA - Light (10 per 10 sweeps) in alfalfa in Choctaw County. (Okla. Coop. Sur.). NEBRASKA - Populations averaged 175 per 10 sweeps in Lancaster County alfalfa. (Bergman).

THREE-CORNERED ALFALFA HOPPER (*Spissistilus festinus*) - ARIZONA - Populations decreasing rapidly in alfalfa throughout State. (Ariz. Coop. Sur.). ARKANSAS - Has been very active in alfalfa, but activity expected to end with advent of needed rain and marked drop in temperature on November 19. (Ark. Ins. Sur.). FLORIDA - Eight adults collected in 100 sweeps of alfalfa 13-15 inches high at Gainesville, Alachua County; some plants in bloom. (Mead, Nov. 19).

A PLANT BUG (*Taylorilygus pallidulus*) - FLORIDA - Total of 142 adults collected in 100 sweeps of alfalfa 13-15 inches high at Gainesville, Alachua County; some plants blooming. (Mead, Nov. 19).

A SPOTTED CUCUMBER BEETLE (*Diabrotica undecimpunctata tenella*) - NEW MEXICO - Averaged 2-4 adults per 25 sweeps in Roosevelt County alfalfa. (N.M. Coop. Rpt.).

ALFALFA WEEVIL (*Hypera postica*) - OHIO - Larvae in various stages ranged 0.1-0.3 per sweep in Mahoning and Columbiana Counties during past 2 weeks; adults averaged 0.3 per sweep. (Niemczyk, Nov. 17).

GREEN CLOVERWORM (*Plathypena scabra*) - ARKANSAS - Activity ended with marked drop in temperature on November 19. (Ark. Ins. Sur.). MICHIGAN - Single adult taken in Livingston County blacklight trap on evening of November 17. (Newman).

CLOUDED SULPHUR (*Colias philodice*) - MICHIGAN - Few adults still flying in Oakland County November 17. Autumn weather exceptionally mild until November 19. (Newman).

GREENBUG (*Schizaphis graminum*) - TEXAS - Survey conducted in 24 panhandle counties during period October 28 to November 11. *S. graminum* found in Deaf Smith, Castro, Parmer, Oldham, Randall, Potter, Swisher, Hale, Carson, Sherman, Hansford, Hutchinson, Armstrong and Donley Counties. None found in Briscoe, Floyd, Gray, Roberts, Ochiltree, Lipscomb, Hemphill, Hartley, Moore and Collingsworth Counties. Populations low, not over 5 per foot; found mostly in large volunteer wheat. Found only in 3 fields in drilled wheat. Predators, lady beetles and damsel bugs quite numerous due to late, warm fall. (Daniels). OKLAHOMA - Counts of 2 per linear foot noted in wheat in Cotton County, southwest. (Okla. Coop. Sur.).

CORN LEAF APHID (*Rhopalosiphum maidis*) - OKLAHOMA - Light in wheat and barley in Cotton County; averaged 2-3 per linear foot. (Okla. Coop. Sur.). TEXAS - Found in most all fields surveyed for *Schizaphis graminum* (greenbug) in 24 panhandle counties. (Daniels).

TARNISHED PLANT BUG (*Lygus lineolaris*) - NEBRASKA - Adults averaged 23 per 10 sweeps in green oats headed out in unpicked field of corn in Colfax County. (Bergman). FLORIDA - In alfalfa 13-15 inches high at Gainesville, Alachua County, 15 adults collected in 100 sweeps; some plants in bloom. (Mead, Nov. 19).

FALL ARMYWORM (*Spodoptera frugiperda*) - NEBRASKA - Larvae ranged 4-6 per 10 ears and caused light damage in field of corn in Colfax County. (Bergman). See note below by E. L. Todd on change of scientific name.

FLEA BEETLES - TEXAS - Generally quite numerous in small grains surveyed in 24 panhandle counties; apparently causing no damage. (Daniels).

ERIOPHYID MITES - TEXAS - Found in small grains in Deaf Smith, Potter, Swisher, Carson, Lipscomb and Sherman Counties during survey conducted October 28 to November 11 for *Schizaphis graminum* (greenbug) in 24 panhandle counties. Populations much heavier in Lipscomb County than other 5 counties. (Daniels).

GRASSHOPPERS - SOUTH DAKOTA - Egg development ranged clear to segmented, with majority in coagulated stage. Approximately 5 percent of eggs diseased and parasitized. *Melanoplus bivittatus* (two-striped grasshopper), *M. differentialis* (differential grasshopper), *M. femurrubrum* (red-legged grasshopper) and *M. sanguinipes* (migratory grasshopper) dominant species. (Burge).

COWPEA APHID (*Aphis craccivora*) - CALIFORNIA - Nymphs and adults medium on Russian-thistle in Oildale area, Kern County. (Cal. Coop. Rpt.).

A CHANGE IN THE SCIENTIFIC NAME OF THE FALL ARMYWORM

The fall armyworm, previously known as *Laphygma frugiperda* (J. E. Smith), must now be called *Spodoptera frugiperda* (J. E. Smith). The genus *Laphygma* Guenée has been synonymized with *Spodoptera* Guenée by Zimmerman (Insects of Hawaii, vol. 7, p. 331, 1958). He included only the species occurring in Hawaii - *mauritia* (Bdv.) (the type of *Spodoptera*), *exempta* (Wlk.), and *exigua* (Hbn.) (the type of *Laphygma*). He did not specifically include or exclude other species formerly placed in *Laphygma*. The new combination, *Spodoptera frugiperda* (J. E. Smith), has not appeared in the literature subsequent to 1958. Therefore, notification of the combination is made so that the name will be available for identification purposes and for use in future biological and ecological reports. (E. L. Todd, Ent. Res. Div., ARS, USDA).

FRUIT INSECTS

CODLING MOTH (*Carpocapsa pomonella*) - NEW MEXICO - Caused considerable loss in untreated and improperly treated orchards in San Juan County. (N.M. Coop. Rpt.).

PEACH TREE BORER (*Sanninoidea exitiosa*) - GEORGIA - Two males taken in peach orchard at Fort Valley, Peach County. (Hollon, Snapp, Nov. 16).

WOOLLY APPLE APHID (*Eriosoma lanigerum*) - NEW MEXICO - Moderately heavy in some apple orchards in northern San Juan County. (N.M. Coop. Rpt.).

WHITE PEACH SCALE (*Pseudaulacaspis pentagona*) - TEXAS - Heavy locally on pear trees in Harris County. (Rainwater, Nov. 13).

SAN JOSE SCALE (*Aspidiotus perniciosus*) - NEW MEXICO - Light to heavy on apple, apricot, rose, and pyracantha in Farmington-Aztec area, San Juan County. (N.M. Coop. Rpt.).

COTTONY MAPLE SCALE (*Pulvinaria innumerabilis*) - CALIFORNIA - Heavy on black walnut nursery stock in McArthur, Shasta County. (Cal. Coop. Rpt.).

BLACK PECAN APHID (*Melanocallis caryaefoliae*) - ALABAMA - This species and *Monellia* spp. contributed to heavy pecan losses. (McQueen).

PECAN WEEVIL (*Curculio caryae*) - TEXAS - Grubs heavy in pecan orchards in Hood County. (Drake, Nov. 13).

MEXICAN FRUIT FLY (*Anastrepha ludens*) - ARIZONA - Two adult males trapped at Nogales, Santa Cruz County; one October 20 and one November 3. These are the first this year. (Ariz. Coop. Sur.). CALIFORNIA - One marked, sterile fly recovered in San Diego County during the period October 25-31. (Cal. Coop. Rpt.). MEXICO - In Tijuana, 13,679 sterile, marked specimens, 2 native males and 2 native females taken from 1,000 traps on 700 properties. In Tecate, 120 traps on 60 properties yielded 1,726 sterile, marked specimens. In Ensenada, 220 traps on 100 properties yielded 3,205 sterile, marked specimens and one native male. Liberation of sterile specimens in Baja California as follows: Tijuana, 4 releases, 418,110 males; Tecate, 2 releases, 34,650 males; and Ensenada 3 releases, 11,500 males and females. (PPC Mex. Reg., Oct. Rpt.).

MEDITERRANEAN FRUIT FLY (*Ceratitis capitata*) - MEXICO - Double-wick, multilure Steiner traps installed in States of Colima, Guerrero, Baja California, Sonora, Sinaloa, Oaxaca, Tamaulipas, Veracruz and at Mexico City Airport. Inspection of 3,040 traps in these States and in States of Chiapas, Yucatan, Campeche, Mexico, Hidalgo, Puebla and Jalisco negative. (PPC Mex. Reg., Oct. Rpt.).

CITRUS RUST MITE (*Phyllocoptruta oleivora*) - FLORIDA - All stages moderate and scattered on leaves of sweet orange in nursery at Winter Haven, Polk County. (Youtsey, Nov. 16).

TEA SCALE (*Fiorinia theae*) - FLORIDA - Infestation 100 percent upon grapefruit seedlings inspected in nursery at Melrose, Putnam County. (Graham, Nov. 9).

CITRUS BLACKFLY (*Aleurocanthus woglumi*) - MEXICO - *Chemical Control Zone* - Two light infestations involving 3 trees with 7 infested leaves found in Municipio Hualahuises, Nuevo Leon, October 20. In States of Nuevo Leon, Sonora and Baja California, 59,889 citrus trees inspected on 1,708 properties including 23,162 nursery trees in Nuevo Leon. *Biological Control Zone* - In State of Tamaulipas, 31,063 citrus trees inspected on 15 properties; 2,792 trees on 11 properties infested. Total of 77,500 parasites captured in grove in Municipio Guemez in Victoria-Tamaulipas area. Although most properties in State of Nayarit and Territory of Baja California under control by *Amitus hesperidum* (a parasatic platygasterid), liberation of *Prospaltella opulenta* (a parasitic eulophid) recommended. (PPC Mex. Reg., Oct. Rpt.).

Citrus Insect Situation in Florida - Mid-November - CITRUS RUST MITE (*Phyllocoptruta oleivora*) infested 62 percent of groves (norm 71 percent); 51 percent economic (norm 46 percent). Above average and in high range. Decreasing trend underway; however, some heavy infestations may be expected in all districts. Highest districts south, west and central. TEXAS CITRUS MITE (*Eutetranychus banksi*) infested 28 percent of groves (norm 29 percent); 12 percent economic (norm 9 percent). Near normal moderate level for time of year. Further increase expected; scattered groves will have important infestations. Highest districts north and west. CITRUS RED MITE (*Panonychus citri*) infested 28 percent of groves (norm 52 percent); 7 percent economic (norm 25 percent). At lowest record for November. Although gradual increase expected, all districts will remain in low range and few infestations will be important. GLOVER SCALE (Lepidosaphes gloverii) infested 73 percent of groves (norm 28 percent); 26 percent economic (norm 1 percent). Above normal and in high range; slight increase expected. Highest districts south, central and east. PURPLE SCALE (L. beckii) infested 75 percent of groves (norm 67 percent); 5 percent economic (norm 4 percent). Near normal and in moderate range; little change expected. CHAFF SCALE (Parlatoria pergandii) infested 62 percent of groves (norm 42 percent); 9 percent economic (norm 1 percent). Above normal and in moderate range; little change expected. Highest districts south, central and east. YELLOW SCALE (Aonidiella citrina) infested 52 percent of groves (norm 11 percent); 9 percent economic (norm 1 percent). Above normal; decrease to low range expected. Highest district south. BLACK SCALE (Saissetia oleae) infested 29 percent of groves (norm 33 percent); 9 percent economic (norm 8 percent). In normal low range. Highest districts east and central. FLORIDA RED SCALE (Chrysomphalus aonidum) infested 14 percent of groves (norm 59 percent); none economic (norm 12 percent). At record low level since August. BROWN SOFT SCALE (Coccus hesperidum) infested 14 percent of groves (norm 42 percent); none economic (norm 1 percent). Less abundant since June than in any comparable month during the past 14 years of record. Populations of WHITEFLIES dropped to normal level for November. (W.A. Simanton (Citrus Expt. Sta., Lake Alfred)).

TRUCK CROP INSECTS

BEET LEAFHOPPER (Circulifer tenellus) - CALIFORNIA - Spraying of isolated thistle and brush areas in southwestern San Joaquin Valley nearing completion; 3,800 acres treated. Populations on perennial brush in White Water Pass, Riverside County, ranged 1-10 per 10 sweeps; this represents movement of overwintering form from thistle areas in northwestern Riverside County to southeastern desert areas. (Cal. Coop. Rpt.).

MELON APHID (Aphis gossypii) - ARIZONA - Heavy increase on home planted cucurbits noted in Yuma, Yuma County. (Ariz. Coop. Sur.).

LEAF MINER FLIES (Liriomyza spp.) - FLORIDA - Infestation ranged 89 and 100 percent with light damage to celery in commercial planting at Sanford, Seminole County. (Desin, Nov. 12 and 19).

CABBAGE LOOPER (Trichoplusia ni) - TEXAS - Counts up to 21 per head on cabbage in the lower Rio Grande Valley. (Wolfenbarger, Nov. 16). ARIZONA - Continues a problem in lettuce fields in Maricopa and Yuma Counties. Some reduction in numbers in Yuma County. (Ariz. Coop. Sur.).

TOMATO FRUITWORM (Heliothis zea) - ARIZONA - Scattered but continues to require control in lettuce fields in Maricopa County. (Ariz. Coop. Sur.).

A SAP BEETLE (Conotelus mexicanus) - NEW MEXICO - Damage to developing lettuce heads probably caused by this species in Mesilla Valley, Dona Ana County. (N.M. Coop. Rpt.).

SWEETPOTATO WEEVIL (Cylas formicarius elegantulus) - Inspections made of field plantings and retail outlets in LOUISIANA; newly infested properties found in Avoyelles, East Baton Rouge, Livingston, Tangipahoa, Vernon and Washington Parishes. Total of 19 previously infested properties released from regulation in ALABAMA. Postharvest field inspections made in Appling, Ben Hill, Colquitt, Decatur and Grady Counties, GEORGIA; all negative except for one survival infestation in Appling County. (PPC South. Reg., Oct. Rpt.).

FOREST, ORNAMENTAL AND SHADE TREE INSECTS

APHIDS - CALIFORNIA - Pemphigus populitransversus (poplar petiole gall aphid) medium on poplar leaves in Carmichael, Sacramento County; heavy locally in El Cajon, San Diego County; and light in Fresno, Fresno County. (Cal. Coop. Rpt.). ARIZONA - Macrosiphoniella sanborni (chrysanthemum aphid) very heavy on chrysanthemums in Yuma and Maricopa Counties. (Ariz. Coop. Sur.). NEW MEXICO - Cinara thujafilina present on most arborvitae in northern San Juan County; honeydew problem on walks. A dark, black aphid, probably Cinara sp., very noticeable and feeding on globe willow at Farmington and Aztec, San Juan County. (N.M. Coop. Rpt.). MICHIGAN - Winged and wingless forms of Pterocomma smithiae continue present on some Ingham County willow trees November 17. (Dowdy). NORTH CAROLINA - Cinara strobi (white-pine aphid) eggs present on white pine in Orange County. (Barnes).

CITROPHILUS MEALYBUG (Pseudococcus fragilis) - CALIFORNIA - Nymphs and adults heavy on buglevine (Ajuga sp.) in Hollister, San Benito County. (Cal. Coop. Rpt.).

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - TENNESSEE - Serious outbreak on Oak Ridge area; 2,200-acre tract owned by University of Tennessee inspected by University and State forestry entomologists. Numerous infestations located in 9-10 separate areas widely scattered over tract. Marking for sanitation and salvage cut now underway. Similar infestations reported on large forest holding of Atomic Energy Commission in same area. Sanitation cut underway on that property. (Buckner). ALABAMA - Caused extensive damage to 6-acre stand of young pines in Covington County; approximately 90 percent of pines affected. (Johnson, Stephenson). TEXAS - Activity at low level. Biweekly aerial detection revealed 18 infestations. Most recent activity in Hardin, Jasper and Tyler Counties. (Tex. Forest Pest Comm., Oct. Rpt.).

BLACK TURPENTINE BEETLE (Dendroctonus terebrans) - ALABAMA - Numerous, small infestations in southeast area. Reported in Henry, Barbour and Houston Counties on loblolly and longleaf pines. Most damage observed along highways where trees prunned during summer by construction crews. (Kimbrough, Barfield et al.). TEXAS - Infestations on loblolly and shortleaf pines on National forests reported from Angelina, Houston and Trinity Counties. Longleaf pine also attacked in Angelina County. Although damage constant, attempts to reduce populations underway. (Tex. Forest Pest Comm., Oct. Rpt.).

ENGRAVER BEETLES (Ips spp.) - TEXAS - High populations of I. avulsus, I. grandicollis and I. calligraphus noted in association with other bark beetles. In San Jacinto County, 60 trees killed by Ips spp. and Dendroctonus terebrans (black terpentine beetle) in 5 separate spots. (Tex. Forest Pest Comm., Oct. Rpt.).

A LEAF BEETLE (Galerucella sp.) - NEW MEXICO - Light on Chinese elm in Farmington area, San Juan County; adults seeking shelter. (N.M. Coop. Rpt.).

EASTERN TENT CATERPILLAR (Malacosoma americanum) - ALABAMA - Egg masses appearing in wild cherry trees in southern part of State, especially in Henry and Barbour Counties; much less numerous in northern counties where only 1 tree in 10 with 1-3 egg masses observed. (McQueen).

A LYONETIID MOTH (Bucculatrix albertiella) - CALIFORNIA - Larvae medium on valley oak in Visalia, Tulare County. (Cal. Coop. Rpt.).

A NOCTUID MOTH (Catabena esula) - CALIFORNIA - Larvae medium on lantana leaves locally in Ontario, San Bernardino County. (Cal. Coop. Rpt.).

TOBACCO BUDWORM (Heliothis virescens) - TEXAS - Heavy locally on petunias in Lubbock County. (Rummel, Nov. 13).

OMNIVOROUS LOOPER (Sabulodes caberata) - CALIFORNIA - Larvae heavy on holly plants in Hollister, San Benito County. (Cal. Coop. Rpt.).

A GALL WASP (Plagiotrochus suberi) - CALIFORNIA - Heavy and causing characteristic galls on cork oak (Quercus suber) trees in Redwood City, San Mateo County. (Cal. Coop. Rpt.).

SPIDER MITES (Oligonychus spp.) - CALIFORNIA - O. platani heavy on pyracantha plants in Coronado, San Diego County. O. ununguis (spruce spider mite) medium on Rosedale juniper nursery stock locally in Fresno, Fresno County. (Cal. Coop. Rpt.).

HOUSEHOLD AND STRUCTURAL INSECTS

BOXELDER BUG (Leptocoris trivittatus) - MARYLAND - Nymphs and adults abundant around and on buildings in Baltimore. (U. Md., Ent. Dept., Nov. 20). NORTH CAROLINA - Noted in Transylvania County. (Davis). MINNESOTA - Continues to annoy homeowners in Minneapolis-St. Paul area. (Minn. Ins. Rpt.).

CLOVER MITE (Bryobia praetiosa) - DELAWARE - Invading homes in New Castle County. (Burbutis).

LARGER YELLOW ANT (Acanthomyops interjectus) - MARYLAND - Winged forms noted around property in Frederick County. (U. Md., Ent. Dept.).

INDIAN-MEAL MOTH (Plodia interpunctella) - OKLAHOMA - Noted in stored products in several homes in Stillwater area, Payne County. (Okla. Coop. Sur.).

OLD-HOUSE BORER (Hylotrupes bajulus) - NORTH CAROLINA - Adults and larvae light in baseboards in Wake County home. (Wright)

INSECTS AFFECTING MAN AND ANIMALS

MOSQUITOES - DELAWARE - Aedes sollicitans (salt-marsh mosquito) adults remain fairly common and annoying in scattered areas of eastern Kent and Sussex Counties. (Wheatley). NORTH CAROLINA - A. sollicitans lighting at rate of 100 per minute in upper marsh area of Pamlico County during week of November 10. Culex pipiens quinquefasciatus (southern house mosquito) larvae ranged 5-6 per dip in creeks around Greensboro, Guilford County; emergence beginning. (Ashton). FLORIDA - Culex salinarius biting man working in garage at night in residential area of Gainesville, Alachua County. (Mead).

HOUSE FLY (Musca domestica) - OKLAHOMA - Light to moderate in homes and around cattle in Pushmataha, Cleveland and Bryan Counties. (Okla. Coop. Sur.). ARKANSAS - Continued breeding in poultry buildings until November 19; activity should be ended. (Ark. Ins. Sur.).

HORN FLY (Haematobia irritans) - OKLAHOMA - Moderate (200 per head) in Bryan County; light (150 per head) in Cleveland and Pushmataha Counties. (Okla. Coop. Sur.).

FLEAS - CALIFORNIA - Pulex irritans (human flea) light in Santa Barbara home, Santa Barbara County. (Cal. Coop. Rpt.). OKLAHOMA - Ctencephalides spp. infesting several homes in Stillwater area, Payne County. (Okla. Coop. Sur.).

HOG LOUSE (Haematopinus suis) - OKLAHOMA - Moderate on hogs in Stephens County; first fall report of species in State. (Okla. Coop. Sur.).

CATTLE LICE - OKLAHOMA - Several species light to moderate on cattle in Pushmataha and Stephens Counties. (Okla. Coop. Sur.).

BLACK WIDOW SPIDER (Latrodectus mactans) - OKLAHOMA - Found in house in Lawton, Comanche County. (Okla. Coop. Sur.).

A BROWN SPIDER (Loxoceles reclusa) - OKLAHOMA - Reported in Stephens County homes. (Okla. Coop. Sur.).

STORED-PRODUCT INSECTS

CIGARETTE BEETLE (Lasioderma serricorne) - TEXAS - Locally heavy and damaging household products in Denton County. (Turney, Nov. 16). ALABAMA - Adults heavy in kitchen in Auburn, Lee County; source was cereal from local grocery. (McQueen).

SAW-TOOTHED GRAIN BEETLE (Oryzaephilus surinamensis) - FLORIDA - Larvae light in millet birdseed at Fort Myers, Lee County. (Adkins, Nov. 9).

YELLOW MEALWORM (Tenebrio molitor) - NEW MEXICO - Larvae found in feed and seed bags in Roosevelt County. (N.M. Coop. Rpt.).

VINEGAR FLIES (Drosophilia spp.) - NORTH CAROLINA - Numerous in some sweet-potato storage areas. (Covington).

MISCELLANEOUS INSECTS

IMPORTED FIRE ANT (Solenopsis saevissima richteri) - Aerial treatment applied to 11,700 acres in Harris County, TEXAS; 5 acres in Dallas County treated. Aerial treatments completed in northern part of LOUISIANA and more than 3,000 acres treated with ground equipment in several parishes. Extensions of infested area or new spot infestations found in Bossier, Grant, Rapides, Richland, Vernon, Webster and La Salle Parishes. Infestation found for the first time in Sabine Parish in Toro community. Aerial treatments completed in Humphreys, Sharkey, Hinds and Yazoo Counties, MISSISSIPPI; mound treatment applied to areas of Choctaw, Jefferson Davis and Webster Counties. Aerial treatments in Limestone and Morgan Counties, ALABAMA, completed; 68,490 acres treated. Treatments of 29,400 acres in Bulloch and Bibb Counties, GEORGIA, completed; survey of treated blocks in De Kalb and Henry Counties negative. Extension in Douglas, Coffee County, mostly along highway rights-of-way. In SOUTH CAROLINA, aerial treatment completed on all known infested areas in Berkeley, Charleston and Dorchester Counties; retreatment necessary in Orangeburg County. Infestations found along dikes in wildlife refuge in Jasper County treated. Survey of treated areas in Carteret and Craven Counties, NORTH CAROLINA, encouraging; 10 mounds found in treated area, all at one location. (PPC South. Reg., Oct. Rpt.).

WHITE-FRINGED BEETLES (Graphognathus spp.) - Negative surveys made in 13 TENNESSEE counties; small extensions in several known infested counties; found for the first time in Marshall County. Survey in NORTH CAROLINA revealed extensions of infested areas in Mecklenburg, Cabarrus, Stanly, Sampson, Scotland and Robeson Counties; small areas treated in several counties. Reported for the first time in Gaston County. Small extension in Florence County and new area of 50 acres found in McCormick County, SOUTH CAROLINA. Small areas of infestation found in Choctaw, Chilton and Clarke Counties, ALABAMA. Surveys made in 7 LOUISIANA parishes; small extensions found in Acadia and St. Charles Parishes; treatment applied to road shoulders in Lafayette Parish. (PPC South. Reg., Oct. Rpt.).

DRIED-FRUIT MOTH (Vitula edmandsae serratilineella) - CALIFORNIA - Larvae heavy in bee hive in Salinas, Monterey County. (Cal. Coop. Rpt.).

A CONOPID FLY (Stylogaster biannulata) - FLORIDA - Taken in vehicle at Longwood, Seminole County; species rarely collected in State. (Desin).

CITRUS WHITEFLY (*Dialeurodes citri*) - CALIFORNIA - Over 1,000 city blocks inspected in Sacramento area. Infestation persists in over 100 blocks. Spraying scheduled to begin November 17, weather permitting. Less than half of area sprayed in 1963 will be retreated. (Cal. Coop. Rpt.).

A LAND SNAIL (*Succinea ovalis*) - CALIFORNIA - Adults heavy on outside of clay pots in nursery in Mountain View, Santa Clara County. (Cal. Coop. Rpt.). This species feeds on decaying vegetation and fungi. (ARS).

CORRECTIONS

CEIR 14(42):1150 - A CHRYSAUGID MOTH (Galasa nigrinoides) should read (Galasa nigrinodis).

CEIR 14(47):1245 - STATUS OF THE SCREW-WORM (Cochliomyia hominivorax) IN THE SOUTHWEST - Table 1, 1963 Ration of Positive Cases to 100 Cases Negative. Change figure for "current cases" from 3.6 to 80.2.

LIGHT TRAP COLLECTIONS

	Temperature °F	Precipitation	Type of trap *	Agrotis ipsilon (black cutworm)	Carpocapsa pomonella (codling moth)	Chorizagrotis auxiliaris (army cutworm)	Estigmene acrea (salt-marsh caterpillar)	Faronta diffusa (wheat head armyworm)	Feltia subterranea (granulate cutworm)	Heliothis virescens (tobacco budworm)	Heliothis zea (bollworm, corn earworm)	**Spodoptera frugiperda (fall armyworm)**	Loxostege commixtalis (alfalfa webworm)	Loxostege similalis (garden webworm)	Loxostege sticticalis (beet webworm)	Ostrinia nubilalis (European corn borer)	Peridroma saucia (variegated cutworm)	Prodenia ornithogalli (yellow-striped armyworm)	Protoparce quinquemaculata (tomato hornworm)	Protoparce sexta (tobacco hornworm)	Pseudaletia unipuncta (armyworm)	Spodoptera exigua (beet armyworm)	Trichoplusia ni (cabbage looper)	Major crop **
FLORIDA																								
Gainesville 11/16			BL	2					4			8						2			14			
GEORGIA																								
Tifton 11/5-11	38-75	None	BL							0	20								0	0				
MISSISSIPPI																								
Stoneville 11/14-20	35-84	2.71"	MV	42					163		5	54					1	2			94	61		
Stoneville 11/14-20	35-84	2.71"	BL	62					163		5	64						15			98	109		
TEXAS																								
Brownsville 11/11-18			5 BL	48			1		58		0	615		51			29	2			76		62	
Waco 11/14-20			BL	22			0		158	1	0	83					306	2			112	19	2	
WISCONSIN																								
Madison 11/13-18			BL	20							8	1					5				6			
Middelton 11/12-18			BL	9							5	8					5				3			

* BL = blacklight; I = incandescent; MV = mercury vapor ; O = other

** alf. = alfalfa; beet = garden beet and/or sugar beet; cole = cole crops (crucifers); cott. = cotton; FC = field corn; grain = small grains; leg. = legumes (unspecified); lett. = lettuce; pean. = peanut; pepp. = pepper; pot. = potatoes; SC = sweet corn; sol. = solanaceous plants (unspecified); soy. = soybean; TC = truck crops (unspecified or mixed); tob. = tobacco; tom. = tomato.

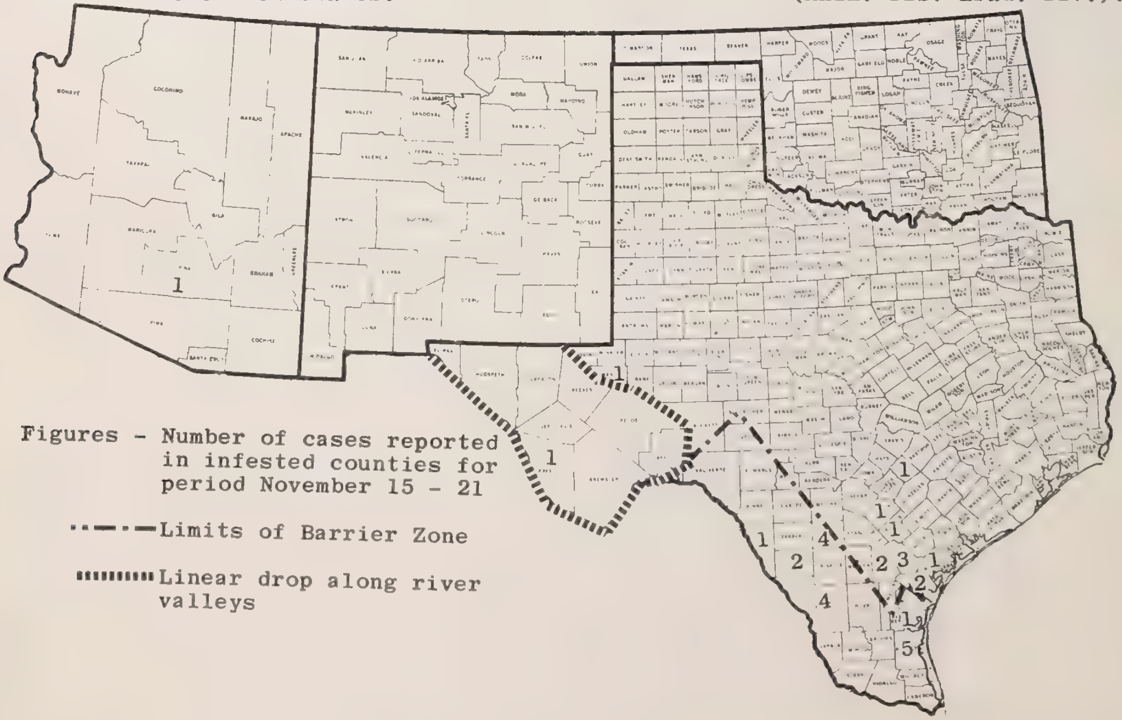
STATUS OF THE SCREW-WORM (Cochliomyia hominivorax) IN THE SOUTHWEST

During the period November 15 - 21, TEXAS reported 30 screw-worm cases in 15 counties: 5 in Kenedy County, 4 in Webb and Frio Counties, 3 in Bee County, 2 in Dimmit, San Patricio and Live Oak Counties, and 1 each in Presidio, Maverick, Ward, Kleberg, Karnes, Wilson, Caldwell and Refugio Counties. No cases reported from NEW MEXICO. In ARIZONA, 1 case was reported from Pinal County. The Republic of Mexico reported 290 cases: Sonora 159, Nuevo Leon 12, Tamaulipas 24, Durango 13, Zacatecas 2, Chihuahua 55, Coahuila 14, San Luis Potosi 4, Veracruz 5 and Puebla 2. Sterile screw-worm flies released: Texas 21,140,250, Arizona 4,740,000, New Mexico 1,500,000 and Mexico 56,648,000.

	Positive Cases		Negative Cases		Ratio of Positive Cases to 100 Cases Negative	
Year	Current	Cumulative	Current	Cumulative	Current	Cumulative
Table 1. Comparison of specimens reported during corresponding weeks in 1962 and 1963 in Southwestern Eradication Area.						
1962	427	49,536	35	2,951	1,220	1,678.6
1963	108	6,213	194	6,968	55.7	89.2
1964	30	231	211	5,991	14.2	3.8
Table 2. Comparison of specimens reported during corresponding weeks and in a corresponding area in 1963 in the United States-Mexico Barrier Zone.*						
1963	114	5,701	8	1,321	1,425	431.6
1964	278	4,128	100	1,933	278	213.6
Table 2A. Mexican portion of Barrier Zone only.						
1963	61	1,905	8	201	762.5	947.8
1964	264	3,886	54	841	488.9	459.3

---

* Barrier Zone - Area in which screw-worm eradication operations are being carried out in an effort to prevent establishment of self-sustaining screw-worm population in the United States. (Anim. Dis. Erad. Div.).



Figures - Number of cases reported in infested counties for period November 15 - 21

▪▪▬▪▬Limits of Barrier Zone

▮▮▮▮▮▮▮▮Linear drop along river valleys

INTERCEPTIONS OF SPECIAL INTEREST AT U.S. PORTS OF ENTRY

Some important interceptions that were reported by the Plant Quarantine Division, ARS, USDA, on September 30, 1964, follow. These reports are based on identifications received from Federal taxonomists at the U.S. National Museum during the month, and include any of special interest from recent months that were not previously reported.

LEEK MOTH (*Acrolepia assectella* (Zell.)) in stores at Philadelphia, Pennsylvania.

MEXICAN FRUIT FLY (*Anastrepha ludens* (Loew)) 93 times in baggage, cargo, stores and quarters; at Brownsville (28), Eagle Pass (5), Progreso (1), San Antonio (1), Corpus Christi (1), Laredo (18), Houston (1), Galveston (1), Roma (7), and El Paso (12), Texas; Tampa (2) and Pensacola (1), Florida; John F. Kennedy International Airport (5), New York; Nogales (3), Arizona; San Ysidro (4) and Calexico (3), California.

CHILEAN GRAPE MITE (*Brevipalus chilensis* Baker) 3 times on lemon in stores at Miami, Florida.

A BRUCHID (*Bruchus tristiculus* Fahr.) once in mail at Hoboken, New Jersey.

A BRUCHID (*Callosobruchus analis* (F.), or probably that species) (a pest of legumes in southern Asia) in stores once each at Honolulu, Hawaii, and Wilmington, North Carolina.

PEACH FRUIT MOTH (*Carposina niponensis* Wlsm.) in stores once each at Wilmington, North Carolina, and Baton Rouge, Louisiana.

MEDITERRANEAN FRUIT FLY (*Ceratitis capitata* (Wied.)) 54 times in baggage, stores and cargo; at Tampa (1) and Miami (1), Florida; Savannah (1), Georgia; Baltimore (1), Maryland; Chicago (2), Illinois; New York (3) and John F. Kennedy International Airport (7), New York; New Orleans (2), Louisiana; and 36 times in Hawaii.

ASIATIC RICE BORER (*Chilo suppressalis* (Wlk.)) 19 times in baggage, quarters, stores and cargo; at Corpus Christi (1), Texas; Travis AFB (1), San Diego (5) and San Francisco (1), California; and 11 times in Hawaii.

AN ELATERID (*Conoderus rufangulus* (Gyll.)) in air cargo of 2 tents at Wilmington, North Carolina.

A WEEVIL (*Conotrachelus* sp.) (of unknown importance and distribution) in avocado in baggage at Brownsville, Texas.

A WIREWORM (*Ctenicera* sp.) with rhododendron plants in cargo at Hoboken, New Jersey.

ORIENTAL FRUIT FLY (*Dacus dorsalis* Hend.) 21 times in baggage, quarters and cargo; at Seattle (1), Washington; Hawaii (16); and San Francisco (4), California.

YELLOW PEACH MOTH (*Dichocrocis punctiferalis* (Guen.)) (fruit pest in Asia and Australia) 2 times in cargo and baggage at Seattle, Washington.

A POTATO WEEVIL (*Epicaerus* sp.) 3 times in stores and baggage; at Brownsville (2) and Roma (1), Texas.

EGGPLANT FRUIT BORER (*Leucinodes orbonalis* Guen.) in stores at New York, New York.

EUROPEAN CARROT BORER (*Phalonia zephyrana* (Treit.)) twice in stores of carrots at Philadelphia, Pennsylvania.

A WEEVIL (*Premnotrypes* sp.) twice in baggage and 6 times in stores in potatoes; at Mobile (1), Alabama; Pensacola (1), Florida; and Galveston (4), Texas.

EUROPEAN CHERRY FRUIT FLY (*Rhagoletis cerasi* (L.)) 66 times in air stores, air baggage and air quarters; at John F. Kennedy International Airport (54) and New York (1), New York; San Pedro (2), California; Philadelphia (1), Pennsylvania; Boston (1), Massachusetts; Dover (1), Delaware; Norfolk (1), Virginia; and Chicago (5), Illinois.

A NOCTUID MOTH (*Sesamia nonagriodes* (Lef.)) (larvae a grain pest) in baggage at Boston, Massachusetts.

A STENOMID MOTH (*Stenoma catenifer* Wlsm.) (a pest of avocado) 9 times in baggage and cargo; at Miami (4), Florida; New Orleans (1), Louisiana; San Diego (1) and San Pedro (1), California; Brownsville (1) and Eagle Pass (1), Texas.

WHITE GARDEN SNAIL (*Theba pisana* (Müller)) 32 times in cargo, baggage and stores; at Wilmington (4), North Carolina; Charleston (1), South Carolina; John F. Kennedy International Airport (5) and New York (8), New York; Dover (2), Delaware; New Orleans (5), Louisiana; Norfolk (5), Virginia; Philadelphia (1), Pennsylvania; and San Juan (1), Puerto Rico.

A TORTRICID MOTH (*Tortrix excessana* (Wlk.)) (needle tying species of pines) 5 times in apple cargo; at Honolulu (1), Hawaii; and Charleston (4), South Carolina.

KHAPRA BEETLE (*Trogoderma granarium* Everts) 91 times in stores, ships holds and infesting or contaminating cargoes of gum Karaya, gum hashab, gum talha, gum arabic, cotton piece goods, tamarind seed powder, rubber, kapok, plywood, chili peppers, rice, beans, peas, burlap bags and wrappings, and wrappings for steel products; at Detroit (7), Michigan; New York (26), New York; Charleston (7), South Carolina; Wilmington (1), North Carolina; New Orleans (4), Louisiana; Seattle (1), Washington; Savannah (2), Georgia; Philadelphia (3), Pennsylvania; Duluth (1), Minnesota; Baltimore (17), Maryland; Houston (2), Texas; Tampa (1) and Jacksonville (2), Florida; Dulles International Airport (1), Virginia; San Francisco (1) and San Pedro (3), California; San Juan (2), Puerto Rico; and Cleveland (6) and Toledo (4), Ohio.

OAT CYST NEMATODE (*Heterodera avenae*) 3 times; twice at New York, New York, once in ship's baggage and once in ship's cargo; once at Houston, Texas, from soil contaminated automobiles.

GOLDEN NEMATODE (*Heterodera rostochiensis*) 14 times; 7 times at San Francisco, California, 6 times from soil contaminated automobiles and once in ship's cargo; 4 times at Miami, Florida, one time each with soil from automobiles, in ship's cargo, in plane's baggage, and in ship's stores; once at Baltimore, Maryland, on used tractors; once at Travis AFB, California, with plane's cargo; once at Houston, Texas, with soil from automobiles.

ESTIMATED LOSSES AND PRODUCTION COSTS ATTRIBUTED TO INSECTS AND RELATED ARTHROPODS

IN Texas (State or District) DURING 1963 (Year)

ATTACKING Grain sorghum (Commodity or Crop)

A. Pest or pest complex: Sorghum midge, corn earworm, chinch bug, sorghum webworm

B. Number of acres[a] produced (From CRS) No. 5,772,000

C. Average yield per acre[a] (From CRS) Units/ 42.5 bu.

D. Price[b] per unit (bu.)[c] (From CRS) $/ 0.85

E. Acres[a] needing control No. 3,500,000

F. Acres[a] treated No. 1,500,000

G. Reduction due to not treating where needed:

H. Loss in yield, percent % 35

I. Loss in yield, units per acre[a], C x H Units/ 14.8 bu.

J. Loss in yield, $ per acre[a], D x I $/ 12.58

K. Loss in quality, $ per acre[a] $/ -----

L. Yield loss for all acres[a], (E-F) x I Units 29,600,000 bu.

M. Control cost, $ per acre[a], $/ 2.00

N. Control cost for all acres[a], F x M $ 3,000,000

O. Yield loss for all acres[a], (E-F) x J $ 25,160,000

P. Quality loss for all acres[a], (E-F) x K $ -----

Q. Combined control cost and losses, N + O + P $ 28,160,000

R. Percent loss due to each insect in the complex:

Comment: Figures do not include seed treatments. This estimate is based only on sorghum grain and does not include forage or silage.

a. Acres, head of cattle or other producing units used by Crop Reporting Service.

b. Season average price per unit as given by CRS (describe basis).

c. Bushels, boxes, tons or other marketing units used by CRS; show which in ( ).

Submitted by M. V. Meisch

Date May 6, 1964

ATTACKING Wheat (Commodity or Crop)

A. Pest or pest complex: Greenbug, winter grain mite, fall armyworm, armyworm

B. Number of acres[a] produced (From CRS) No. 2,321,000

C. Average yield per acre[a] (From CRS) Units/ 17.5 bu.

D. Price[b] per unit (bu.)[c] (From CRS) $/ (estimate) 1.50

E. Acres[a] needing control No. 300,000

F. Acres[a] treated No. 150,000

G. Reduction due to not treating where needed:

H. Loss in yield, percent % 10

I. Loss in yield, units per acre[a], C x H Units/ 1.75 bu.

J. Loss in yield, $ per acre[a], D x I $/ 2.62

K. Loss in quality, $ per acre[a] $/ -----

L. Yield loss for all acres[a], (E-F) x I Units 262,500 bu.

M. Control cost, $ per acre[a], $/ 1.00

N. Control cost for all acres[a], F x M $ 150,000

O. Yield loss for all acres[a], (E-F) x J $ 393,000

P. Quality loss for all acres[a], (E-F) x K $ -----

Q. Combined control cost and losses, N + O + P $ 543,000

R. Percent loss due to each insect in the complex:

Comment: Yields were below average due to winter kill and spring drought.

a. Acres, head of cattle or other producing units used by Crop Reporting Service.

b. Season average price per unit as given by CRS (describe basis).

c. Bushels, boxes, tons or other marketing units used by CRS; show which in ( ).

Submitted by M. V. Meisch

Date May 6, 1964

ESTIMATED LOSSES AND PRODUCTION COSTS ATTRIBUTED TO INSECTS AND RELATED ARTHROPODS

ATTACKING Cotton (lint) (Commodity) IN Texas (State or District) DURING 1963 (Year)

A. Pest or pest complex: Spider mites, aphids, thrips, fleahoppers, boll weevil, tobacco budworm, bollworm, cotton leafworm, pink bollworm, beet armyworm, cabbage looper

B.	Number of acres[a] produced (From CRS)	No.	5,875,000 (harvested)
C.	Average yield per acre[a] (From CRS)	Units/	379 lbs.
D.	Price[b] per unit (pound)[c] (From CRS)	$/	0.30 (estimated)
E.	Acres[a] needing control	No.	4,700,000
F.	Acres[a] treated	No.	3,700,000
G.	Reduction due to not treating where needed:		
H.	Loss in yield, percent	%	25
I.	Loss in yield, units per acre[a], C x H	Units/	94.75 lbs.
J.	Loss in yield, $ per acre[a], D x I	$/	28.43
K.	Loss in quality, $ per acre[a]	$/	1.00
L.	Yield loss for all acres[a], (E-F) x I	Units	94,750,000 lbs.
M.	Control cost, $ per acre[a]	$/	10.00
N.	Control cost for all acres[a], F x M	$	37,000,000
O.	Yield loss for all acres[a], (E-F) x J	$	28,430,000
P.	Quality loss for all acres[a], (E-F) x K	$	1,000,000
Q.	Combined control cost and losses, N + O + P	$	66,430,000

R. Percent loss due to each insect in the complex:

Comment: These figures apply only to insect loss. Loss from disease is not calculated as losses due to insects and diseases are extremely difficult to calculate.

a. Acres, head of cattle or other producing units used by Crop Reporting Service.

b. Season average price per unit as given by CRS (describe basis).

c. Bushels, boxes, tons or other marketing units used by CRS; show which in ( ).

Submitted by M. V. Meisch

Date May 6, 1964

UNITED STATES DEPARTMENT OF AGRICULTURE
Hyattsville, Maryland 20781

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE

U. S. Dept. of Agr.
National Agricultural Library
Beltsville Branch
11-27-63 Plant Industry Station
IPS Beltsville, Md. 20705